Amendments to the Claims

1. (previously presented) A method for planning the introduction of a fluid in a tissue, the method comprising:

capturing via an imaging system functional anatomical data and/or structural anatomical data before infusion of a fluid into the tissue;

evaluating the captured functional and/or structural anatomical data with computer assistance and without use of an infusion fluid;

based on the evaluating step, identifying directional channels within the tissue and determining infusion distribution information related to the identified directional channels, the identified directional channels and/or infusion distribution information being indicative of advantageous and/or non-advantageous infusion regions; and

presenting identified advantageous and/or non-advantageous infusion regions for viewing by a user; and

based on the advantageous and/or non-advantageous infusion regions, using medical navigation to introduce an infusion device at a selected point.

2. (previously presented) The method as set forth in claim 1, wherein evaluating the captured functional and/or structural anatomical data includes simulating apart from the tissue a distribution of an infusion at a plurality of regions in the tissue.

3. (previously presented) The method as set forth in claim 1, wherein the determined infusion distribution information includes direction information and/or velocity information relating to infusion regions in the tissue.

4. (previously presented) The method as set forth in claim 1, wherein the functional and/or structural anatomical data is evaluated two-dimensionally with respect to the distribution information which it contains.

5. (previously presented) The method as set forth in claim 1, wherein the functional and/or structural anatomical data is evaluated three-dimensionally with respect to the distribution information which it contains.

6. (previously presented) The method as set forth in claim 1, further comprising:

evaluating the functional and/or structural anatomical data over a period of time with respect to the distribution information; and

making adjustments in the distribution information, said adjustments being responsive to anatomical or structural conditions which have changed over the period of time.

7. (original) The method as set forth in claim 3, further comprising:

identifying regions of rapid diffusion.

8. (original) The method as set forth in claim 3, further comprising:

determining isotropy and anisotropy of flow directions in the regions in the tissue.

9. (previously presented) The method as set forth in claim 1, further comprising:

calculating a distribution volume for an infusion fluid from the functional and/or structural anatomical data.

10. (previously presented) The method as set forth in claim 1, wherein the functional and/or structural anatomical data is captured two-dimensionally.

11. (previously presented) The method as set forth in claim 10, wherein a number of two-dimensional data sets on the functional and/or structural anatomical data are combined to obtain three-dimensional information.

12. (previously presented) The method as set forth in claim 1, wherein the functional and/or structural anatomical data is captured three-dimensionally.

13. (original) A method for assisting planning for introducing an infusion fluid into regions of a brain, said method comprising:

identifying infusion regions using a method as set forth in claim 1; and

wherein introducing the infusion at a selected point is planned using stereotactic planning.

14. (original) A method for assisting navigation for introducing an infusion into regions of a brain, said method comprising:

identifying the infusion regions and positions for an infusion device are identified using a method as set forth in claim 1; and

wherein introducing the infusion device at a selected point is planned using stereotactic navigation.

15. (original) The method as set forth in claim 13, wherein anatomical, functional and/or structural tissue data are combined with information on a distribution of the infusion fluid to be expected for planning or navigation.

16. (canceled)

17. (cancelled)

18. (previously presented) A device for assisting planning for introducing an infusion fluid into regions of the brain, said device comprising:

an imaging device that captures functional and/or structural anatomical data before an infusion of fluid into regions of the brain;

a processor which is programmed to:

perform and assist in evaluating the functional and/or structural anatomical data in order to identify directional channels within the regions of the brain and determine infusion distribution information related to the identified directional channels, the directional channels and infusion

distribution information being indicative of advantageous and non-advantageous infusion regions; and

produce and evaluate a distribution simulation apart from the regions of the brain before the infusion fluid is infused, the distribution simulation being indicative of an infusion fluid when it is introduced at particular points, on the basis of the captured anatomical data; and

a computer-assisted, medical planning and navigation system for assisting in positioning an infusion device.

19. (original) The device as set forth in claim 18, wherein the imaging device includes a nuclear spin tomograph.

20. (original) The device as set forth in claim 18, wherein the imaging device, the processor and the medical planning and navigation system are connected to each other via data connections, thereby providing a constant or retrievable exchange of data.

21. (previously presented) The method as set forth in claim 1, further comprising obtaining diffusion measurements before infusion via magnetic resonance diffusion imaging and identifying transport pathways based on the diffusion measurements.

22. (previously presented) A method for planning the introduction of a fluid in a tissue, the method comprising:

capturing via an imaging system functional anatomical data and/or structural anatomical data before infusion of any infusion fluid into the tissue;

evaluating the captured functional and/or structural anatomical data with computer assistance;

based on the evaluating step, identifying directional channels within the tissue and determining infusion distribution information related to the identified directional

channels, the identified directional channels and/or infusion distribution information being indicative of advantageous and/or non-advantageous infusion regions; and

presenting identified advantageous and/or non-advantageous infusion regions for viewing by a user; and

based on the advantageous and/or non-advantageous infusion regions, using medical navigation to introduce an infusion device at a selected point.